



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,403	09/12/2003	Andrew Vaillant	16051-4US CC	6672
20988	7590	10/14/2005	EXAMINER	
OGILVY RENAULT LLP 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			HURT, SHARON L	
			ART UNIT	PAPER NUMBER
			1648	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,403	Applicant(s) VAILLANT ET AL.	
	Examiner Sharon Hurt	Art Unit 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |



DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 - 26, are drawn to an oligonucleotide formulation comprising at least one antiviral oligonucleotide, classified in class 436, subclass 23.1.
If this group is elected, an election of species is further required.
- II. Claims 27, is drawn to a method for selecting an antiviral oligonucleotide to use as an antiviral agent, classified in class 435, subclass 32.
- III. Claims 28 - 29, are drawn to a method for the treatment of a viral infection, classified in class 514, subclass 44. If this group is elected, an election of species is further required.
- IV. Claims 30 - 31, are drawn to a method for the prophylactic treatment of cancer caused by oncoviruses, classified in class 514, subclass 44. If this group is elected, an election of species is further required.
- V. Claim 32, is drawn to a method of screening to identify a compound that alters binding of an oligonucleotide to a least one viral component, classified in class 435, subclass 5.
- VI. Claim 33, is drawn to an antiviral compound, classified in class 514, subclass 1.

- VII. Claims 34 - 38, are drawn to a method for purifying and enriching oligonucleotides from a pool of oligonucleotides, classified in class 536, subclass 35.4.
- VIII. Claims 39 - 40, are drawn to an antiviral oligonucleotide preparation comprising one or more oligonucleotides wherein the preparation exhibits a higher binding affinity with at least one viral component, classified in class 536, subclass 23.1. If this group is elected, an election of species is further required.

The inventions are distinct, each from the other because:

Group I and Group II is not related because Group I is drawn to an antiviral oligonucleotide, wherein the antiviral activity occurs by a non-sequence complementary mode of action. Group II is drawn to a method for selecting an antiviral oligonucleotide for use as an antiviral agent, comprising synthesizing a plurality of different random oligonucleotides. Group II doesn't have a non-sequence mode of action.

Group V is drawn to a method of screening to identify a compound that alters binding of an oligonucleotide to at least on viral component. This method is not related to antiviral activity and does not have a non-sequence complementary mode of action. This method could be used to identify oligonucleotide with out antiviral activity.

Group VI, an antiviral compound, is unrelated to Group V because it is not an oligonucleotide. The antiviral compound could be made a different way and is not related to the kit.

Group VII drawn to a method for purifying and enriching oligonucleotides from a pool of oligonucleotides is not related to Group I. The method is not necessarily binding a viral genome.

Group VIII drawn to an antiviral oligonucleotide preparation wherein the oligonucleotides show higher binding affinity with viral component is not related to Group I. The antiviral oligonucleotide in Group VIII is not a non-sequence complimentary mode of action.

Inventions in Group I and Groups III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case Group III is drawn to a method of treatment for viral infection while Group IV is a method for preventing cancer. These are two materially different uses for two different patient types. For example, a method for treating the flu would be different than a method of preventing cervical cancer.

Groups I, III, IV, and VIII contain claims generic to a plurality of disclosed patentably distinct species comprising all possible oligonucleotides of 5 – 120 nucleotides in length. The claims encompass an astronomical number of different oligonucleotides, including a very large number, which are mutually distinct because they share no common sequence structure. Each oligonucleotide requires a separate search. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1648

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon Hurt whose telephone number is 571-272-3334. The examiner can normally be reached on M-F 8:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Housel James can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11 October 2005



MARY E. MOSHER, PH.D.
PRIMARY EXAMINER